Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A measurement apparatus for vehicle body alignment work, which measurement apparatus is used in connection with an alignment table (10) to whose fastenings ($11a_1$, $11a_2$, $11a_3$, $11a_4$) the vehicle is attached for the time of the alignment work, and a measurement unit ($17a_1$, $17a_2$) of which measurement apparatus (15) can be moved in a vertical guide ($15b_1$,$15b_2$), which vertical guide ($15b_1$,$15b_2$) can further be moved in a longitudinal guide ($15a_1$, $15a_2$), and which measurement unit ($17a_1$) is provided with a movable measurement arm (40), wherein the measurement arm (40) comprises an articulation (41) to which a first arm part (42) is connected such that the first arm part (42) is pivoted on support of the articulation (41) with respect to the measurement arm (40), and that to the first arm part (42) is connected a second arm part (43) which is turned around its longitudinal axis (X_{30}), to which second arm part (43) a measurement head (65) is connected either directly or through an intermediate part; and

a second structure formed by the first and second arm parts (42,43) which can be extended in the direction of a longitudinal axis (X_{20}) of the first arm part (42) such that the second arm part (43) can be displaced with respect to the first arm part (42) to different length positions;

<u>wherein the second arm part (43) comprises a through hole (64) formed at an end thereof</u>

through which the measurement head (65) is passed perpendicularly to the longitudinal axis (X_{30}) of the second arm part;

wherein the articulation (41) at the end of the measurement arm (40) further comprises a sleeve part (44), a backing body (48) being pivotable with respect to the sleeve part (44) to alternative angular positions such that the backing body (48) comprises at its end face (48b) holes ($49a_1$,$49a_2$...), and that the sleeve (44) placed against said backing body (48) comprises at its end face (44b) holes ($45a_1$,$45a_2$,$45a_3$), into which balls ($46a_1$,$46a_2$ ...) are positioned in locking positions, and that the balls ($46a_1$,$46a_2$) placed into the holes ($49a_1$,$49a_2$ ...) of the backing body (48) and are pressed into the holes by springs ($47a_1$,$47a_2$), the backing body (48) being pivotable to a desired angular position/locking position according to the spacing determined by the angular distance between the holes, and that the arm part (42) associated with the backing body (48) can be turned in a horizontal plane with respect to the measurement arm (40); and

wherein the first arm part (42) further comprises at both its ends, holes ($55a'_1$, $55a_1$; $55a'_2$,$55a_2$... $56a'_1$,$56a_1$;$56a'_2$,$56a_2$ ...), in which connection springs ($61a_1$, $61a_2$,...)' and balls ($62a_1$,$62a_2$) situated in holes ($60a'_1$,$60a_1$; $60a'_2$,$60a_2$) of the second arm part (43) can be brought alternatively either into the holes ($55a'_1$,$55a_1$,...) of one end of the first arm part (42) or into the holes ($56a'_1$,$56a_1$, ...) of the other end thereof, in which connection the balls ($62a_1$,$62a_2$ ...) can be turned through a desired angular spacing and they will be positioned alternatively in the holes ($55a'_1$,$55a_1$,... or $56a'_1$,$56a_1$,... of the first arm part (42) in locking positions.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Previously Amended) A measurement apparatus as claimed in claim 1, wherein the second arm part (43) further comprises an end piece (700) and therein a through hole (64) for the measurement head (65), and that the measurement head (65) comprises grooves ($66a_1$,$66a_2$), in which connection the measurement head (65) can be placed in alternative positions, the end piece (700) comprising an end stub (67) into whose inner hole (68) a ball (69) and a spring (70) are placed, a screw (71) pressing the ball (69) into one of the grooves ($66a_1$, or $66a_2$..) defined by the locking position of the measurement head (65).

7. (Previously Amended) A measurement apparatus as claimed in claim 1, wherein the second arm part (43) further comprises an end sleeve (600), made of plastic, at the end on the side of the first arm part (42), which end sleeve is attached by means of a cotter (63) to a metal portion (430) of the

second arm part (43), enabling good bearing properties for at least one ball ($62a_1$,$62a'_1$...).

8. (Previously Presented) A measurement apparatus as claimed in claim 1, wherein the first arm part (42) further comprises end threads (57) at its end, onto which threads a nut (59) is mounted, so that by means of a tension sleeve (58) situated between the nut (59) and the second arm part (43), the second arm part (43) can be locked to different positions with respect to the first arm part (42), the tension sleeve (58) being split in a longitudinal direction, thereby serving as a tension washer when the nut (50) tightens it against the arm part (43), the thread (57) being a taper thread.

9. (Previously Presented) A method in vehicle body alignment work in the measurement of a vehicle body, which method employs a measurement apparatus (15) which is connected to an alignment table. and which comprises longitudinal guides ($15a_1$,$15a_2$) extending parallel to the longitudinal axis (X) of the vehicle as well as vertical guides ($15b_1$,$15b_2$), the vertical guides ($15b_1$,$15b_2$) moving in the longitudinal guides ($15a_1$,$15a_2$) and comprising a measurement unit ($17a_1$,$17a_2$) which can be moved in the vertical guides ($15b_1$,$15b_2$), and that the measurement unit ($17a_1$,$17a_2$) is provided with a movable measurement arm (40) which can be moved in a horizontal direction with respect to the measurement unit ($17a_1$), the method comprising the step of:

providing a measurement apparatus wherein said measurement apparatus comprises at the end of the measurement arm (40) a movable first arm part (42) which moves in a horizontal plane, and that a second arm part (43) having a longitudinal axis (X_{30}) is connected to said first arm part (42) which can be moved and positioned in a horizontal plane, said second arm part (43) being

rotatable around its longitudinal axis (X30), and that a measurement head (64) is connected to the second arm part (43), whereby, by using the arrangement in accordance with the invention, the measurement locations situated inside the vehicle body (A) can also be measured by the same measurement head (64).

10. (Previously Presented) A method as claimed in claim 9, wherein the combination of locking positions of each arm part (42,43) and the measurement head (64) connected to the measurement arm (40) is read and fed into the memory of a computer or said combination is detected electrically by using position detectors which indicate the pivot position of the first arm part (42), the rotation position of the second arm part (43) connected to the first arm part (42) and the linear position of the measurement head (64) connected to the second arm part (43), and that, based on said data fed or directly electrically detected, the result of measurement is at least one of being directly indicated on a display of a computer or equivalent [and/]or said measurement result is printed as a measurement record.

11. (Previously Presented) A measurement apparatus for use in vehicle body alignment work when a vehicle to be aligned is in place on an alignment table and attached thereto by means of fastenings, said apparatus comprising:

a measurement unit structured and arranged to be movable within a vertical guide, wherein said vertical guide is structured and arranged to be movable within a longitudinal guide; said

measurement unit having a movable measurement arm comprising a first arm part, having a first arm part longitudinal axis, pivotally connected to said measurement arm via an articulation at a first end of said first arm part, and a second arm part slidably insertable within said first arm part, having a second arm part longitudinal axis, operatively connected at a second end to said first arm part, wherein said connection between said first arm part and said second arm part is such that said second arm part is rotatable about said second arm part longitudinal axis; and

a measurement head operatively coupled to a second end of said second arm part.

12. (Previously Presented) The measurement apparatus according to claim 1, wherein said second arm part is structured and arranged to be slidably adjustable with respect to said first arm part longitudinal axis to different selected axial positions.

13. (Previously Presented) The measurement apparatus according to claim 1, wherein said second arm part further comprises:

a measurement through hole formed at said second end thereof for receiving said measurement head therethrough; said through hole being structured and arranged such that when said measurement head is displaced therein, said measurement head is perpendicularly aligned with respect to said second arm part longitudinal axis.

14. (Previously Presented) The measurement apparatus according to claim 1, wherein said

articulation further comprises:

a sleeve part connected to an end of said measurement arm and being perpendicular to said first arm longitudinal axis and having a top surface and a bottom surface, said bottom surface being provided with a plurality of holes for receiving a ball therein; and

a backing body formed at said first end of said first arm part having a top face structured and arranged to abut said bottom surface of said sleeve part, said top face being provided with a plurality of holes for cooperating with said holes formed in said bottom surface of said sleeve part, said holes in said top surface of said backing body being structured and arranged to receive a plurality of compression springs therein, such that when said backing body is aligned and coupled with said sleeve part, said springs press said balls into said holes on said bottom surface of said sleeve part and are retained therein; whereby said first arm part is pivotably about a horizontal plane with respect to said measurement arm.

15. (Previously Presented) The measurement apparatus according to claim 11, further comprising:

a plurality of through holes formed at said first end and said second end of said first arm part; and

through holes formed in said first end of said second arm part structured and arranged for receiving springs therein and balls placed atop said springs, whereby when said second arm part is inserted within said first arm part, said balls cooperate with said through holes of said first arm part

when aligned to thereby lock said second arm part in place with respect to said first arm part into a number of selected positions.

16. (Previously Presented) The measurement apparatus according to claim 11, further comprising:

a plurality of annular grooves are formed on a surface of said measurement head; and

an end piece fitted to said second end of said second arm part and having a measurement through hole formed therein for receiving said measurement head therein, said end piece comprising a stub projecting axially out from said second end of said second arm part having a central hole for receiving a ball and spring assembly therein for cooperating with an annular groove of said measurement head, such that said measurement head is locked into position relative to said second arm part by a screw which presses said ball into said annular groove.

17. (Previously Presented) The measurement apparatus according to claim 11, wherein said second arm part further comprises:

a plastic end sleeve coupled to said first end thereof.

18. (Previously Presented) The measurement apparatus according to claim 11, wherein the first arm part further comprises:

end threads formed at a second end thereof for receiving a nut, whereby a tension sleeve

disposed between said nut and said second arm part permits said second arm part to be locked into different positions with respect to said first arm part.

19. (Previously Presented) A measurement apparatus for vehicle body alignment work, which measurement apparatus is used in connection with an alignment table (10) to whose fastenings ($11a_1$, $11a_2$, $11a_3$, $11a_4$) the vehicle is attached for the time of the alignment work, and a measurement unit ($17a_1$, $17a_2$) of which measurement apparatus (15) can be moved in a vertical guide ($15b_1$, $15b_2$), which vertical guide ($15b_1$, $15b_2$) can further be moved in a longitudinal guide ($15a_1$, $15a_2$) and which measurement unit ($17a_1$) is provided with a movable measurement arm (40), wherein the measurement arm (40) comprises an articulation (41) to which a first arm part (42) is connected such that the first arm part (42) is pivoted on support of the articulation (41) with respect to the measurement arm (40), and that to the first arm part (42) is connected a second arm part (43) which is turned around on its longitudinal axis (X_{30}), to which second arm part (43) a measurement head (65) is connected either directly or through an intermediate part;

wherein a second structure formed by the first and second arm parts (42,43) which can be extended in the direction of a longitudinal axis (X_{20}) of the first arm part (42) such that the second arm part (43) can be displaced with respect to the first arm part (42) to different length positions;

wherein the second arm part (43) comprises at the end therof the measurement head passed perpendicularly to the longitudinal axis (X_{30}) of the second arm part;

wherein the articulation (41) at the end of the measurement arm (40) further comprises a sleeve part (44), a backing body (48) being pivotable with respect to the sleeve part (44) to alternative angular positions such that the backing body (48) comprises at its end face (48b) holes ($49a_1$, $49a_2$,...), and that the sleeve (44) placed against said backing body (48) comprises at its end face (44b) holes ($45a_1$, $45a_2$, $45a_3$) into which balls ($46a_1$, $46a_2$) are positioned in locking positions, and that the balls ($46a_1$, $46a_2$) placed into the holes ($49a_1$, $49a_2$,...) of the backing body (48) and are pressed into the holes by springs ($47a_1$, $47a_2$), the backing body (48) being pivotable to a desired angular position/locking position according to the spacing determined by the angular distance between the holes, and that the arm part (42) associated with the backing body (48) can be turned in a horizontal plane with respect to the measurement arm; and

wherein the first arm part (42) further comprises at both its ends, holes ($55a'_1$, $55a_1$, $55a'_2$...$56a_2$...) in which connection springs ($61a_1$, $61a_2$...) and balls ($62a_1$, $62a_2$) situated in holes ($60a'_1$, $60a_1$, $60a'_2$, $60a_2$) of the second arm part (43) can be brought alternatively into the holes ($55a'_1$, $55a_1$,...) of one end of the first arm part (42) or into the holes ($56a'_1$, $56a_1$...) of the other end thereof, in which connection the balls ($62a_1$, $62a_2$...) can be turned through a desired angular spacing and they will be positioned alternatively in the holes ($55a'_1$, $55a_1$...or $56a'_1$, $56a_1$,...) of the first arm part (42) in locking positions.--